

## CLAIMS

1. A system for providing gastrointestinal pain management during an endoscopic procedure, comprising:
  - an endoscope comprising an operating unit and a flexible shaft that includes at least one lumen; and
  - an anesthetic collar comprising an annulus, wherein said anesthetic collar is adapted for placement on said flexible shaft so as to permit free transfer of a fluid through said at least one lumen of said flexible shaft to said annulus and wherein said annulus comprises an enclosed chamber having a hollow core and one or more expulsion pore to permit fluid flow into the gastrointestinal tract of a patient.
2. The system of claim 1, wherein said anesthetic collar further comprises an additional lumen and an adapter, said adapter being coupled to both said at least one lumen and said additional lumen.
3. The system of claim 1, wherein said fluid comprises at least one of local anesthetics and lubricants.
4. The system of claim 1, wherein said fluids are distributed in an even fashion throughout said gastrointestinal tract.
5. The system of claim 1, wherein said anesthetic collar is permanently affixed to said flexible shaft.
6. The system of claim 1, wherein said anesthetic collar is detachably coupled to said flexible shaft using at least one of an adhesive and friction, shrink, heat shrink, and threaded fit.
7. The system of claim 1, further comprising at least one additional anesthetic collar.

8. The system of claim 1, further comprising a fluid pump to dispense fluid through said lumen of said flexible shaft.

9. The system of claim 1, wherein said adapter includes an aperture with a substantially watertight seal such that an instrument can be passed through said lumen of said flexible shaft and through said aperture to access the gastrointestinal tract of a patient.

10. The system of claim 1, wherein said annulus comprises porous material to allow said fluid to seep through to said gastrointestinal tract in the absence of said expulsion pores.

11. An anesthetic collar for providing gastrointestinal pain management during an endoscopic procedure, comprising:

an annulus including an enclosed chamber having a hollow core and discharge means so as to permit discharge of fluid from the enclosed chamber through the annulus; and

means for securing said annulus to a flexible shaft of an endoscope.

12. The system of claim 11, further comprising an adapter connected to said annulus, wherein said adaptor is coupled to at least one lumen extending substantially along the length of said flexible shaft so as to permit free transfer of a fluid through said at least one lumen to said annulus and wherein said anesthetic collar is adapted for placement near the distal end of an endoscope's flexible shaft.

13. The anesthetic collar of claim 12, further comprising an additional lumen connecting said annulus to said adaptor.

14. The anesthetic collar of claim 11, wherein said at least one lumen is an existing lumen internal to said flexible shaft.

15. The anesthetic collar of claim 11, wherein said at least one lumen is secured to the exterior of the flexible shaft.

16. An apparatus for providing gastrointestinal pain management during an endoscopic procedure comprising:

a lumen extending from a fluid delivery mechanism, wherein said lumen is capable of being inserted through an internal tubular cavity along a flexible shaft of an endoscope and passing beyond the distal end of said shaft; and

a head comprising a plurality of expulsion pores, wherein said head is connected to the distal end of said lumen so as to allow free flow of fluid from said lumen through said expulsion pores so as to facilitate comprehensive dispersion of said fluids into a patient's gastrointestinal tract.

17. The apparatus of claim 16, wherein said apparatus is flexible and can be inserted through an endoscope's flexible shaft.

18. The apparatus of claim 16 wherein said head further comprises a band portion connected to said lumen and encircling said flexible shaft.

19. The apparatus of claim 18, wherein said band portion is made of memory retention material.

20. A flexible shaft for an endoscope for providing fluids during an endoscopic procedure, comprising:

an image receiving window;

a light projecting window;

an instrument lumen for passing instruments related to endoscopic procedures into said patient's gastrointestinal tract;

a fluid lumen extending along the length of said flexible shaft so as to permit free transfer of a fluid; and

one or more outlet lumens connected to said fluid lumen and arranged such that said fluid passing through said fluid lumen is distributed in an even fashion throughout the path of travel of said flexible shaft.

21. The flexible shaft of claim 20, wherein said one or more outlet lumens is located generally near the distal end of said shaft.

22. A method for delivering fluids to the gastrointestinal tract of a patient during an endoscopic procedure, comprising:

providing an endoscope comprising a flexible shaft;

providing a fluid delivery means, wherein the fluid delivery means may be at least one of an anesthetic collar, an insertion member, and a fluid lumen and outlet lumens integrated into said flexible shaft;

preparing the endoscope for insertion;

inserting the endoscope into the patient;

ascertaining whether fluid delivery is desired; and

delivering fluids through said fluid delivery means into the gastrointestinal tract of said patient.

23. The method of claim 22, further comprising coupling the fluid delivery means to said flexible shaft.

24. The method of claim 22, wherein said fluids comprise at least one of dyes, local anesthetics, lubricants and gases.